

EJERCICIOS DE POLINOMIOS

1. $3x(1-2x) - 2(1+x^2) =$

2. $2x(x-1) + (2x-3)^2 =$

3. $(x+2)(2x-3) =$

4. $2x + (x-2)(2x+1) =$

5. $3x^2 - (2x-1)^2 =$

6. $2(3x-2) - 2(2x+1)^2 =$

7. $3(x-1)^2 - 2x(x+3) =$

8. $(x+2)(x-2) - 3(x+2)^2 =$

9. $2x(x-3) - (x-3)(x+3) =$

10. $x(x-3)^2 + 2x(x-2)(x+2) =$

11. $3(2x-3)^2 - 2(2x+1)(2x-1) =$

12. $(2x+3)(x-1) - 2x^2 - x + 3 =$

13. $2(x-2)(x+3) + 3x^2 - 2 =$

14. $2(x-3)(x+1) - 2(x-2)^2 =$

15. $(x-y)(x+y) - 3(x-y)^2 =$

SOLUCIONES A LOS EJERCICIOS DE POLINOMIOS

1. $3x(1-2x) - 2(1+x^2) = 3x-6x^2-2-2x^2 = -8x^2+3x-2$
2. $2x(x-1) + (2x-3)^2 = 2x^2-2x+4x^2-12x+9 = 6x^2-14x+9$
3. $(x+2)(2x-3) = 2x^2-3x+4x-6 = 2x^2+x-6$
4. $2x + (x-2)(2x+1) = 2x+2x^2+x-4x-2 = 2x^2-x-2$
5. $3x^2-(2x-1)^2 = 3x^2-(4x^2-4x+1) = 3x^2-4x^2+4x-1 = -x^2+4x-1$
6. $2(3x-2) - 2(2x+1)^2 = 6x-4 - 2(4x^2+4x+1) = 6x-4-8x^2-8x-2 = -8x^2-2x-6$
7. $3(x-1)^2 - 2x(x+3) = 3(x^2-2x+1) - 2x^2-6x = 3x^2-14x+7-2x^2-6x = x^2-12x+3$
8. $(x+2)(x-2) - 3(x+2)^2 = x^2-4-3(x^2+4x+4) = x^2-4-3x^2-12x-12 = -2x^2-12x-16$
9. $2x(x-3) - (x-3)(x+3) = 2x^2-6x-(x^2-9) = 2x^2-6x-x^2+9 = x^2-6x+9$
10. $x(x-3)^2 + 2x(x-2)(x+2) = x(x^2-6x+9) + 2x(x^2-4) = x^3-6x^2+9x+2x^3-8x = 3x^3-6x^2+9x-8x = 3x^3-6x^2+x$
11. $3(2x-3)^2 - 2(2x+1)(2x-1) = 3(4x^2-12x+9) - 2(4x^2-1) = 12x^2-36x+27-8x^2+2 = 4x^2-36x+29$
12. $(2x+3)(x-1) - 2x^2 - x + 3 = 2x^2+3x-2x-3-2x^2-x+3 = 0$
13. $2(x-2)(x+3) + 3x^2 - 2 = 2(x^2+3x-2x-6) + 3x^2 - 2 = 2x^2+6x-4x-12+3x^2-2 = 5x^2+2x-14$
14. $2(x-3)(x+1) - 2(x-2)^2 = 2(x^2-3x+x-3) - 2(x^2-4x+4) = 2x^2-6x+2x-6-2x^2+8x-8 = 4x-14$
15. $(x-y)(x+y) - 3(x-y)^2 = x^2-y^2-3(x^2-2xy+y^2) = x^2-y^2-3x^2+6xy-3y^2 = -2x^2-4y^2+6xy$